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APPENDIX

In the Claims

Please cancel claims 30-37.

39. (New) A method for forming a capacitor comprising: providing a non-oxide electrode selected from the group consisting of TiN, TaN, WN, and W, in a deposition chamber oxidizing an upper surface of said non-oxide electrode in an atmosphere containing a gas plasma generated from a gas selected from the group consisting of O₂, O₃, H₂O, and N₂O, in the same deposition chamber depositing a high dielectric constant oxide dielectric material selected from the group consisting of Al₂O₃, Ta₂O₅ and Ba_xSr_(1-x)TiO₃ on the oxidized surface of said non-oxide electrode, and depositing an upper layer electrode on said high dielectric constant oxide dielectric material.

40. (New) A method for forming a capacitor comprising: providing a non-oxide electrode, in a deposition chamber oxidizing an upper surface of said non-oxide electrode in an atmosphere containing a gas plasma generated from a gas selected from the group consisting of O₂, O₃, H₂O, and N₂O, in the same deposition chamber depositing a high dielectric constant dielectric material on the oxidized surface of said non-oxide electrode, and depositing an upper layer electrode on said high dielectric constant oxide dielectric material.

41. (New) A method for forming a capacitor comprising: providing a non-oxide electrode selected from the group consisting of TiN, TaN, WN, and W, in a deposition chamber oxidizing an upper surface of said non-oxide electrode, in the same deposition chamber depositing a high dielectric constant oxide dielectric material on the oxidized surface of said non-oxide electrode, and depositing an upper layer electrode on said high dielectric constant oxide dielectric material.